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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/565,229

01/20/2006

Martin Brodt

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EXAMINER

OMGBA, ESSAMA

ART UNIT

PAPER NUMBER

3726

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/565,229	<b>Applicant(s)</b> BRODT ET AL.	
	<b>Examiner</b> Essama Omgba	<b>Art Unit</b> 3726	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 10-12, 15-21, 24-28 and 31-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-12, 15-21, 24-28 and 31-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

1. In view of the Appeal Brief filed on December 17, 2010, PROSECUTION IS HEREBY REOPENED. New grounds of rejections are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/DAVID P. BRYANT/

Supervisory Patent Examiner, Art Unit 3726

***Specification***

2. The disclosure is objected to because of the following informalities: in paragraph [036], Applicant discloses the heating rate in K/min while the heating temperature is disclosed in degree Celsius, it is therefore not clear what heating unit Applicant is using for the heating rate. For examination purposes, the examiner has taken the disclosed

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“K” unit to be for “Kelvin”. It is suggested that Applicant uses consistent units for both the heating rate and the heating temperature.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 31, 33, 35, 37 and 38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are indefinite in that it is not clear what heating rate unit is recited in the claims. For examination purposes, the examiner is taking K/min to be Kelvin/min.

### ***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 10-12, 16-21, 25-28 and 31-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of Curtiss et al. (US Patent 7,115,322) or Horibe et al. (US Patent 5,756,221) and Kirk (US Patent 1,552,059).

With regards to claims 10, 11, 20 and 21, Applicant, at pages 1 and 2 of the specification to be known as AAPA, discloses a process for producing a press-hardened

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component from a semi-finished product made of unhardened, hot-formable steel sheet, wherein a steel semi-finished product pre-coated with a corrosion prevention layer is formed into a component blank using a cold-forming process, the component blank is subsequently trimmed, and heating and press-hardening the trimmed component blank by hot-forming takes place. AAPA does not disclose covering the press-hardened component blank with a corrosion-prevention layer in a coating step. However it is known to post treat finished components against corrosion as attested by Curtiss et al., (see column 1, lines 51-60 and column 3, lines 23-40), or Horibe et al. (column 1, lines 13-21 and 60-65). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to have modified AAPA by applying the corrosion protection layer after the stamping/trimming operations are performed (rather than before as in AAPA), in light of the teachings of Curtiss et al. or Horibe et al., in order to avoid the possibility that the coating becomes damaged or worn off during the stamping/trimming process. Although Curtiss et al. or Horibe et al. does not specifically disclose the corrosion prevention treatment being a prevention layer deposited by thermal diffusion, however Kirk teaches depositing a Zinc type corrosion protection layer on a metal component by thermal diffusion, see column 1, lines 19-27. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used a thermal diffusion process to coat the press-hardened component blank of AAPA/Curtiss et al./Horibe et al. with a Zinc corrosion-preventing layer, as taught by Kirk, as is known in the art. Applicant should note that it is inherent that the body components of Curtiss et al. and Horibe et al. would have gone through all the

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conventional forming processes such as hardening and trimming to final size since the corrosion coating is provided as a finishing step wherein the components are not further processed. Applicant should also note that the press-hardened components of AAPA are bodywork components.

With regards to claim 12, Official Notice is taken in that cold-forming processes such as drawing to reduce material thickness are old and well known in the art, and the use of cold-forming as recited in the claim would thus have been obvious to one of ordinary skill in the art.

For claims 16-19 and 25-28, Official Notice is taken in that cleaning the surface of a component by blasting the surface with glass particles prior to the coating step, and conditioning the component after the coating, in order to remove foreign matter and enhance coating adhesion for example, are old and well known in the art, and the use of these steps as recited in the claim would thus have been obvious to one of ordinary skill in the art.

For claims 31-35, 37 and 38, Kirk teaches placing the components into a drum, closing the drum and gradually heating the components and controlling the temperature inside the drum in order to properly coat the component while giving the component a desirable heat treatment., see page 1, lines 30-55 and page 2, lines 9-61. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have heated the component of AAPA/Curtiss et al./Horibe et al. at the claimed heating rate and temperature, in light of the teachings of Kirk, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the

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optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

6. Claims 15, 24 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA/Curtiss et al./Horibe et al./Kirk as applied to claims 10 and 20 above, and further in view of Warichet et al. (US Patent 6,921,439).

Regarding claims 15 and 24, AAPA/Curtiss et al./Horibe et al./Kirk discloses a process for producing a press-hardened component as shown above. Although AAPA/Curtiss et al./Horibe et al./Kirk does not explicitly disclose dry cleaning the press-hardened component blank prior to the coating step, however it is known to dry clean steel articles before such coating step in order to assure adherence, continuity and uniformity of the Zinc coating as attested by Warichet et al., see column 1, lines 16-26. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to have dry-cleaned the press-hardened component blank of AAPA/Curtiss et al./Horibe et al./Kirk prior to coating, in light of the teachings of Warichet et al., in order to ensure adherence, continuity and uniformity of the Zinc coating. Applicant should note that Warichet et al., see column 3, lines 24-27, discloses cooling the coated components in a cooling station.

Regarding claim 36, although AAPA/Curtiss et al./Horibe et al./Kirk does not specifically disclose discharging the drum from the cooling installation and cooling the drum in a cooling station, however it is known to remove an article that has been coated in a hot environment from the environment, and to subsequently allow the article to cool down as attested by Warichet et al., see column 3, lines 24-27. Therefore it would have

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been obvious to one of ordinary skill in the art at the time the invention was made, to have discharged the drum of AAPA/Curtiss et al./Horibe et al./Kirk from the cooling station and to have cooled the drum in a cooling station, in light of the teachings of Warichet et al., in order avoid burning injuries by handling a hot drum.

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 10-12, 15-21, 24-28 and 31-38 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Essama Omgba whose telephone number is (571) 272-4532. The examiner can normally be reached on M-F 9-6:30, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Essama Omgba/  
Primary Examiner, Art Unit 3726

eo  
March 14, 2011